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EXAMINER	
JARRETT, SCOTT L	
ART UNIT	PAPER NUMBER
3623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/733,299	BLANCO, EDGAR E.	
	Examiner	Art Unit	
	SCOTT L. JARRETT	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,12-16 and 18-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-10,12-16 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This **Final** Office Action is in response to Applicant's amendments filed April 30, 2008. Applicant's amendments amended claims 1-4, 6-10, 12-16 and 18-21 and canceled claims 5, 11 and 17. Current Claims 1-4, 6-10, 12-16 and 18-21 are pending.

Response to Arguments

2. Applicant's arguments filed April 30, 2008 have been fully considered but they are not persuasive. Specifically Applicant's argue that the prior art of record fails to teach or suggest project type information comprising a list of items used in connection with a type of project wherein the list is constructed based on *at least one of* the following: previous project of the same project type or new material requirement or new service or new regulation (Remarks: Last Paragraph, Page 16).

With respect to applicant's argument that the prior art of record fails to teach or suggest project type information comprising a list of items used in connection with a type of project wherein the list is constructed based on *at least one of* the following: previous project of the same project type or new material requirement or new service or new regulation the examiner respectfully disagrees.

Initially it is noted that utilizing historical (past, previous) projects to 'construct' a list of items you need to similar future projects is old and very well known in project management wherein project managers commonly model new projects based on previous (completed or ongoing) projects that are similar in one way or another wherein doing so provides well known benefits such as incorporating lessons learned from

similar projects (e.g. last time we forgot to do X, this time we need to do X) or simply as a mechanism for quickly "constructing" the list of items needed for a project (e.g. last time we did a project like this we needed Y, this time lets make sure we have Y).

More specifically Berka teaches project type information comprising a list of items used in connection with a type of project wherein the list is constructed based on *at least* ***one*** *of* the following: previous project of the same project type *or* new material requirement *or* new service *or* new regulation (pick lists; Column 2, Last Two Paragraphs, Page 2; Column 2, Paragraph 2, Page 3) - wherein listed items (bill of materials, commodities used by construction and maintenance) represent new requirements (non-standard) as well as items from previous projects.

It is noted that the applicant did not challenge the officially cited facts in the previous office action(s) therefore those statements as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention to utilize project management and/or materials management techniques for installation projects in the communications industry wherein project management and materials management enable firms in the communication industry to manage and control large scale projects such as the installation of communication networks/services and to utilize distributed databases (distributed database management systems, client/server, etc.) wherein distributed databases provide a plurality of benefits/advances including at least transparency (distribution/network, replication, fragmentation), increased reliability and availability or improve performance.

It is noted that the specific data structure (database schema, entity relationship, tables, etc.) claimed merely represent non-functional descriptive material wherein the specific data structure used to realize the forecasting tool does not effect the functionality of the system/method as claimed wherein any of a plurality of specific data structures comprising the same/substantially similar data elements would function in a substantial similar manner and produce the same result, i.e. a forecast/prediction of the materials needed for a project. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Additionally it is noted that the materials management system/method is limited to telecommunications installation projects does not change the overall functionality or structure of the system. The intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Further it is noted that the intended use of the forecasting system/method merely represents non-functional descriptive material wherein the systems intended field of use is not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the workload system/method's intended field of use. Further, the structural elements

remain the same regardless of the workload system/method's intended field of use. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4, 6-10, 12-16 and 18-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Examiner requests clarification as to what statutory class the Applicant's are intended to claim. It is unclear as to what statutory class the invention is directed to as the scope of the invention applicant's are attempting to claim. Specifically it is unclear if the Applicant is intending to claim (1) a data structure comprising multiple tables (non-statutory, non-functional descriptive materials, see MPEP 2106.01), or (2) a forecasting tool (software per se), or (3) computer instructions for creating (instantiating) a forecasting tool on a general purpose computer when the instructions are executed (if so, where are the requisite steps for performing the process) or (4) data stored in a plurality of tables (non-functional descriptive material, no physical transformation) or something else all together different?

For example the preamble of claims 1 and 20 recite computer executable instructions for instantiating a forecasting tool and the body of the claim recites non-functional descriptive material related to a data structure for multiple tables ("the multiple tables comprising".

The preamble of Claim 16 recites computer executable instructions for employing a forecasting tool wherein the body of the claims recites steps for populating database tables with data.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4, 6-10, 12-16 and 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4, 6-10, 12-15 and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: steps for instantiating a forecasting tool.

Claims 1-4, 6-10, 12-15 and 20-21provide for the use of *instructions*, but, since the claim does not set forth any steps involved in the method/process (e.g. what instructions steps are being performed when the stored instructions are executed), it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-4, 6-10, 12-15 and 20-21 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153

USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claims 16 and 18-19 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention wherein it is unclear from the preamble what (the computer executable instructions, forecasting tool, tables, database, or the like) is "configure to:" perform the process steps recited in the body of the claims.

Examiner request's clarification as to what elements listed in the preamble the applicant is intending to refer to.

Claims 1-4, 6-10, 12-15 and 20-2 are rejected below as best understood in light of the 35 U.S.C. 101 and 112 rejections discussed above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-4, 6-10, 12-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puckett et al., Cradle-to-Grave Material Management (1991) in view of

Regarding Claims 1, 6-10,12-16 and 18-21 Puckett et al. teach a system and method (tool) for forecasting items for a project (predicting, determining, calculating future item need/requirements) comprising (Column 1, Paragraph 1, Page 1; Column 2, Last Two Paragraphs, Page 1):

- (tables for) predicting (estimating, calculating, determining, etc.) future demand (need, requirement, etc.) for quantifiable items (materials, supplies, personnel, resources, parts, components, etc.) in connection with a plurality of projects the tables comprising (Column 2, Last Two Paragraphs, Page 1; Column 1, Paragraphs 1-2, Page 4; Column 2, Page 5; Figures 1, 6-7; Table 1):

- (a project table) having project information for each project and including *at least one of the following* reference (link, association, relationship, etc.) to items employed in connection with a project (Figures 1, 6-7; Table 1);

- (an item (materials, supplies, personnel, resources, parts, components, etc.) table) having item information referenced by the project (table) and including a reference to an algorithm (equation, formula, expression, calculation, etc.; e.g. Bill of Materials stored in the database, items list; Column 1, Paragraphs 2-3, Page 2) to determine a quantity of an item for a particular project (Column 2, Paragraph 1, Page 6; Figures 1, 3-5; Table 1); and

- (a algorithm table) having algorithm information for each algorithm referenced by the item table (Bill of Materials, Items List, etc.; Column 1, Paragraphs 2-3, Page 2; Figures 1, 6-7; Table 1);

- populating, by the forecasting tool (i.e. by the system/method), a requirements (table) with information obtained for the tables in response to a modifiable query for item demands wherein the forecasting tool traverses the tables according to the query to accumulate the data necessary to populate the requirements table (Figures 1-4, 6-7; Table 1); and

- outputting, by the forecasting tool, the requirements table for viewing by personnel (Figures 3-7);

- (a milestone table) having milestone information, wherein the project information further including *at least one of* milestone date for the project including at least one key project moment to which a need for an item for the project is referenced and each milestone date referenced by the project table (Column 1, Paragraph 1, Page 1; Column 1, Paragraphs 1-4, Page 2; Column 2, Paragraph 4, Page 2; Figures 2-4);

- the item information further including a reference to the milestone information in the milestone table and information on how to calculate a date when the item is required based on the milestone information (Column 1, Paragraphs 1-2, 4, Page 2; Column 2, Paragraphs 2-4, Page 2);

- (a supplier table) having supplier information for each supplier references by the item table the supplier information including the items supplied by the supplier and information of the items supplied wherein the item information includes an identification of at least one supplier (Column 2, Last Paragraph, Page 1; Column 1, Paragraph 1, Page 2; Column 1, Paragraph 1, Page 6; Figure 2; Table 1);

- calculating an order date based on lead-time information, obtained from the supplier table, and the requirement date (e.g. applying the actual milestone date to calculate the date on which the item is required; Column 2, Last Paragraph, Page 1; Column 1, Paragraphs 2, 4, Page 2; Column 2, Paragraph 3, Page 3; Figures 3-4);

- the requirements (table) being populated with information including a project, item for the project, an amount of the item required for the project based on inputs the algorithm (BOM, items list, etc.), date when the item is needed for the project, the date when the item must be ordered to satisfy the date when the item is needed and the supplier the item is to be ordered from wherein the requirements table data/information is based on the information in the other tables and is viewed by personnel (Column 1, Paragraph 1, Page 1; Column 2, Last Paragraph, Page 1; Column 1, Paragraphs 1-4, Page 2; Column 2, Paragraphs 1-4, Page 2; Column 2, Paragraph 3, Page 3; Figures 1, 3-7; Table 1).

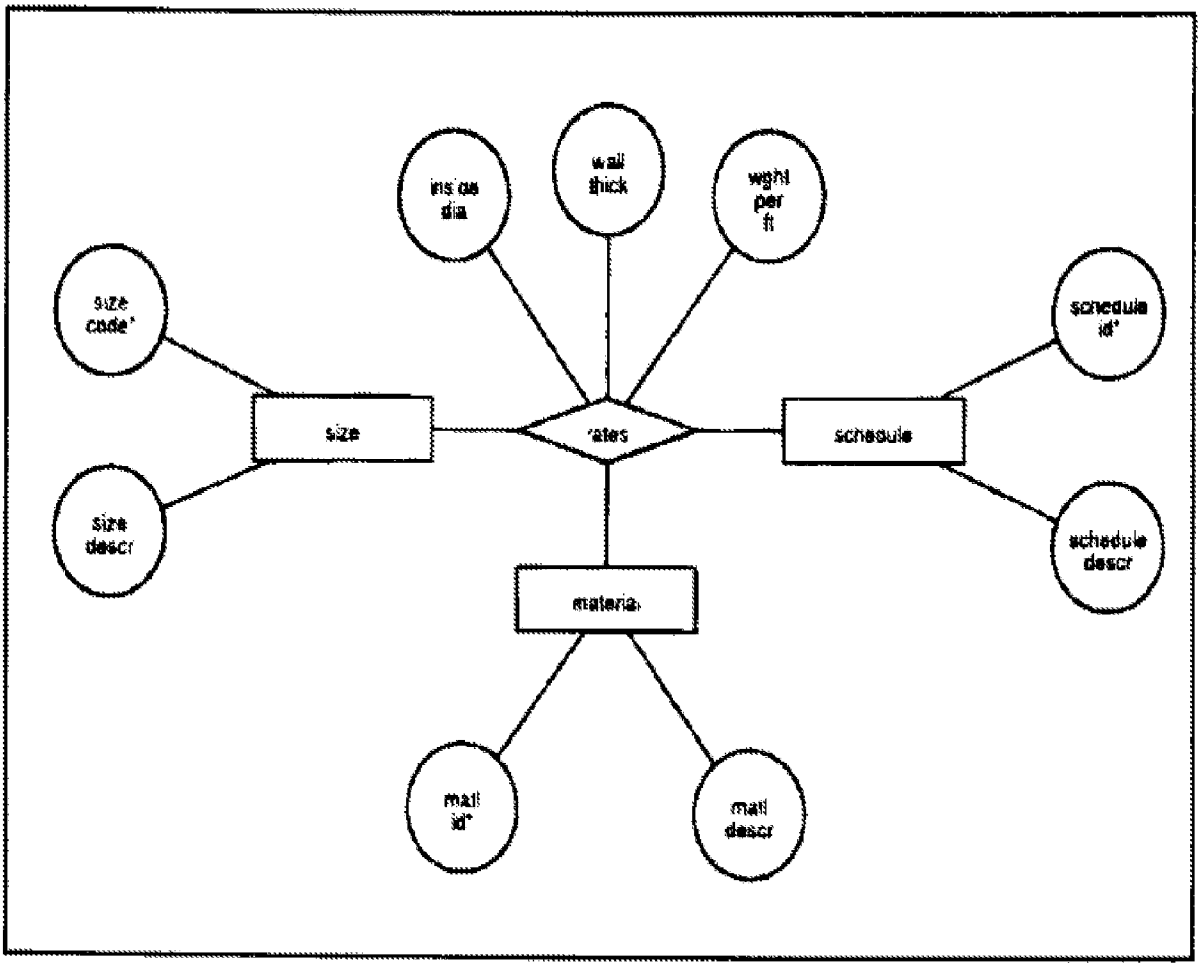


Figure 1 — An Entity Relationship Diagram for Pipe Rating

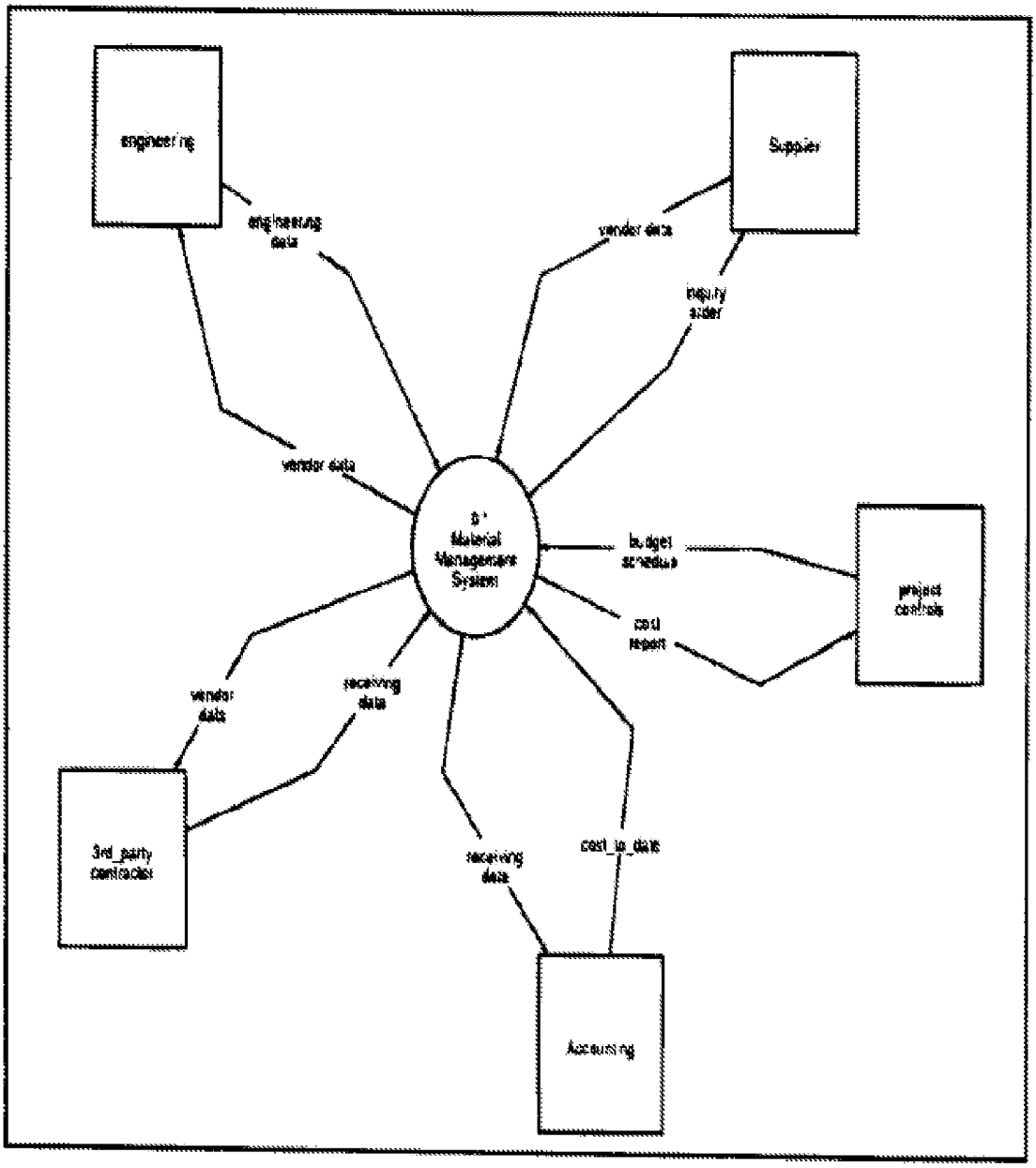


Figure 2 -- A Top-Level Data Flow Diagram

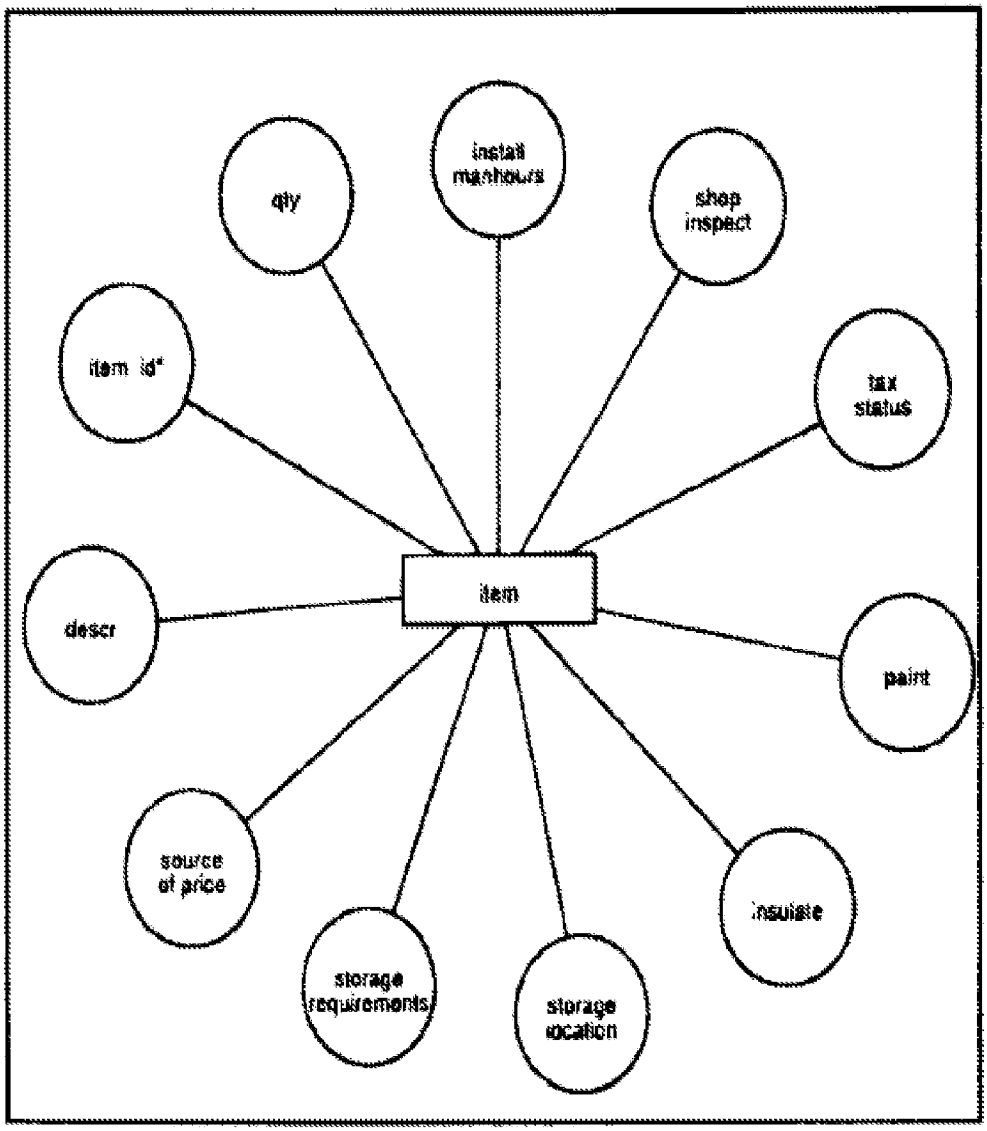


Figure 6 — An Entity Relationship Diagram for Item

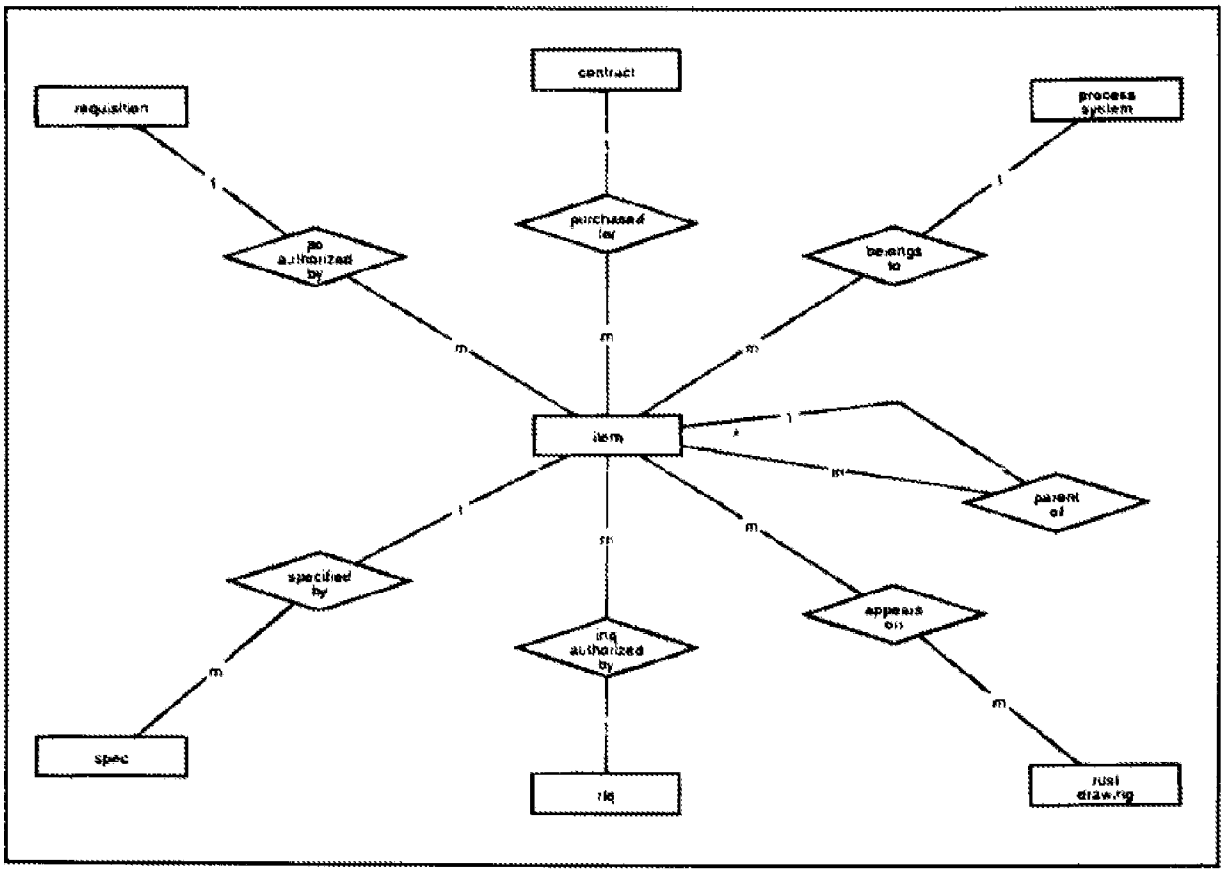


Figure 7 -- An Entity Relationship Diagram that Depicts Relationships of Item

It is noted that the specific data structure (database schema, entity relationship, tables, etc.) claimed merely represent non-functional descriptive material wherein the specific data structure used to realize the forecasting tool does not effect the functionality of the system/method as claimed wherein any of a plurality of specific data structures comprising the same/substantially similar data elements would function in a substantial similar manner and produce the same result, i.e. a forecast/prediction of the materials needed for a project. Thus, this descriptive material will not distinguish the

claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

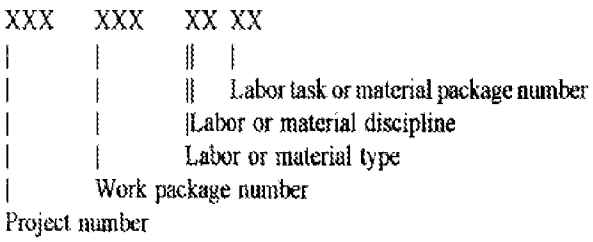
Puckett et al. does not expressly teach a project-type table having project-type information for each project referenced by the table, the project type information including an identification of a project type, each item to be employed in connection with the project type as claimed.

Berka teaches a project-type table having project-type information for each project referenced by the table, the project type information including an identification of a project type, each item to be employed in connection with the project type (pick lists; Column 2, Last Two Paragraphs, Page 2; Column 2, Paragraph 2, Page 3) in an analogous art of materials management for the purposes of enabling users to save and reuse common project items (Column 2, Paragraph 2, Page 3).

More generally Berka teaches a typical materials management system and method comprising a plurality of project information including but not limited to projects, items needed, milestone dates, item order dates, project bill of materials, item specific/supplier specific lead times, supplier information, contract terms, and the like as well as an output (graphical user interface) for providing the plurality of project information to personnel wishing to view such information (Column 2, Paragraphs 1-3,

Last Two Paragraphs, Page 2; Column 1, Last Two Paragraphs, Page 3; Column 2, Paragraphs 1-3, Page 4).

Berka further teaches that the materials management system is distributed amongst/between a plurality of systems/locations (Column 2, Last Paragraph, Page 2)



It would have been obvious to one skilled in the art at the time of the invention that the system and method for forecasting item requirements for a project (forecasting tool for determining/predicting item requirements in terms of quantities, timing, etc.) as taught by Puckett et al. would have benefited from a project-type table having project-type information for each project referenced by the table, the project type information including an identification of a project type, each item to be employed in connection with the project type as taught by Berka et al.; the resultant system/method enabling personnel to save and reuse common project items (Berka et al.: Column 2, Paragraph 2, Page 3).

While the utilization of project management and/or materials management methods are well known in the telecommunications industry neither Puckett et al. nor Berka et al. expressly teach that the intended use of the materials management system and method is limited to only telecommunications installation projects as claimed.

Official notice is taken that the utilization of project management and/or materials management techniques for installation projects in the communications industry is well known and a common business practice wherein project management and materials management enable firms in the communication industry to manage and control large scale projects such as the installation of communication networks/services.

Support for this officially noticed fact can be found in at least the following reference: Imam, Project Management in Telecommunications (1990).

It is noted that the project management and materials management systems and methods disclosed by Puckett et al. and Berka et al. are applicable to any of a plurality of industries and/or project types and are capable of providing well known materials management techniques to forecasting items needed for a telecommunications installation project.

That the materials management system/method is limited to telecommunications installation projects does not change the overall functionality or structure of the system. The intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Further it is noted that the intended use of the forecasting system/method merely represents non-functional descriptive material wherein the systems intended field of use is not functionally involved in the steps recited nor do they alter the recited structural

elements. The recited method steps would be performed the same regardless of the workload system/method's intended field of use. Further, the structural elements remain the same regardless of the workload system/method's intended field of use. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Regarding Claim 2 Puckett et al. teach a material management system and method wherein the items include at least one of the following (selected from the group consisting of): parts, materials, equipment, labor, time or combinations thereof (Column 1, Paragraph 1, Page 1; Figures 1-7; Table 1).

Regarding Claims 3-4 Puckett et al. teach a material management system and method wherein system is distributed over a company (i.e. company wide) and includes a database service for controlling and coordinating the database (Column 1, Paragraph 2, Page 1; Column 1, Paragraph 4, Page 2; Column 2, Paragraph 2, Page 2; Column 1; Figures 1, 6-7).

Berka et al. teach a distributed materials management system and method as discussed above.

Puckett et al. is silent as to the architecture of the database management system and specifically does not expressly teach that the *databases* are distributed across several computers as claimed.

Official notice is taken that the utilization of distributed databases (distributed database management systems, client/server, etc.) is old and very well known wherein distributed databases provide a plurality of benefits/advances including at least transparency (distribution/network, replication, fragmentation), increased reliability and availability or improve performance (Elmasri et al. Chapter 24.1.2 Advantages of Distributed Databases, Pages 767, 769-770). Support for this officially noticed fact can be found in at least the following reference: Elmasri et al., Fundamentals of Database Systems (2000): Chapter 24 Distributed Databases and Client Server Architecture (Pages 765-795).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for materials management as taught by the combination of Puckett et al. and Berka et al. with their utilization of well known database management systems would have benefited from utilizing any of a plurality of well known database architectures/structures/designs including but not limited to distributed databases in view of the teachings of official notice; the resultant system/method providing transparency and/or improved reliability and availability.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Van Doren Beth can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/
Primary Examiner, Art Unit 3623